

REMARKS/ARGUMENTS

Applicant requests reconsideration of the application as amended. The foregoing amendment and the following arguments are provided to impart precision to the claims, by more particularly pointing out the invention, rather than to avoid prior art.

35 U.S.C. § 112 Rejection

Examiner rejected claims 5-9 under 35 U.S.C. 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 has been amended accordingly. Applicant respectfully requests the Examiner to withdraw the rejection.

35 U.S.C. § 102 (b) Rejections

Examiner rejected claims 1-11 and 23-25 under 35 U.S.C. 102 (b) as being anticipated by Narad, U.S. Patent No. 5,287,503.

As amended, **Claim 1** recites:

simultaneously reading original values from a plurality of registers;
parsing a **dependency-producing instruction**;
determining **results of the execution of the dependency-producing instruction**;
determining a select number of registers to be modified in the plurality of registers **based on the dependency-producing instruction**;
modifying a subset of the values in the select number of registers with architecturally correct values comprised of the results of the dependency-producing instruction; and
simultaneously writing the original values and the architecturally correct values to the plurality of registers. (Emphasis added)

Narad fails to disclose parsing a dependency-producing instruction, determining results of the dependency-producing instruction, determining a select number of registers to be modified in the plurality of registers based on the dependency-producing instruction, and modifying a subset of the values in the select number of registers with

architecturally correct values comprised of the results of the dependency-producing instruction, as is claimed by Applicant. Specifically, Narad discloses the processor sets or clears bits of a particular control parameter as needed in subsequent data processing or computing operations. (Narad, col. 1, lines 45-46). Although Narad discloses computing operations and data processing, Narad fails to disclose or suggest dependency-producing instructions, as is claimed by Applicant.

The Examiner argues that all data values stored are at some point used by other instructions, instructions whose results are stored are therefore dependency-producing instructions, thus, all instructions that perform read-modify-write operations are dependency-producing instructions. (Office Action, item 7, p. 5). Applicant respectfully disagrees. Rather, a dependency exists between two instructions if the execution of one depends upon the results of executing the other. (Application, p.1).

Although Narad discloses instructions that perform read-modify-write operations, there is nothing within Narad that discloses or suggests the execution of another instruction is dependent upon the result of a first instruction. By using the stored data values, Narad discloses that the **outcome** of a subsequent instruction is dependent upon the result of the read-modify-write instruction, but fails to disclose that the **execution** of the subsequent instruction is dependent upon the result of the read-modify-write instruction.

Furthermore, machine-language implementation of the execution of an instruction conditioned upon a result of another instruction using **conditional branching does not comprise a dependency** as is claimed by Applicant. Although a branch instruction is based on a particular condition (where the condition may be the result of a prior instruction) and the execution of a subsequent instruction is based on the particular condition, in the context of the present application, **dependencies are implemented without the use of conditional branching**. (Application, p.5, Table 1).

Accordingly, Narad does not anticipate independent claim 1. Independent claim 23 recites limitations similar to those in claim 1 discussed above. Accordingly, claim 23 is also patentable over the cited art for similar reasons. The remaining claims depend from one of the foregoing independent claims and thus include the novel claim limitations discussed above. Therefore, Narad does not anticipate claims 1-11 and 23-25.

Examiner rejected claims 1 and 23 under U.S.C. 102 (b) as being anticipated by Bluhm U.S. Patent No. 5,937,178.

Bluhm fails to disclose parsing a dependency-producing instruction, determining results of the dependency-producing instruction, determining a select number of registers to be modified in the plurality of registers based on the dependency-producing instruction, and modifying a subset of the values in the select number of registers with architecturally correct values comprised of the results of the dependency-producing instruction, as is claimed by Applicant. Specifically, Bluhm discloses a move instruction MOV CH, DL, in which the execution unit returns the resulting 8-bit operand CH to the R/W latch. (Bluhm, col. 7, lines 42-44).

Although Bluhm discloses a move instruction which returns the resulting operand, there is nothing within Bluhm that discloses or suggests that the **execution** of another instruction is dependent upon the result of the MOV instruction. As described by Bluhm, a first instruction 112 (Bluhm, Fig. 7) is executed and the execution unit returns the resulting operand CH. The bytes of the destination register are modified. (Bluhm, col. 7, lines 33-50). A subsequent instruction, which may use the result of the MOV instruction, is executed regardless of the MOV instruction result (CH). By using the stored data value, Bluhm discloses that the **outcome** of another instruction is dependent upon the result of the MOV instruction, but fails to disclose that the **execution** of the other

instruction is dependent upon the result of the MOV instruction. Accordingly, the MOV instruction is not a dependency-producing instruction, as is claimed by Applicant.

Thus, Bluhm does not anticipate independent claims 1 and 23. The remaining claims depend from one of the foregoing independent claims and thus include the novel claim limitations discussed above. Therefore, Bluhm does not anticipate claims 1-11 and 23-25.

In view of the above remarks, a specific discussion of the dependent claims is considered to be unnecessary. Therefore, Applicants' silence regarding any dependent claim is not to be interpreted as agreement with, or acquiescence to, the rejection of such claim or as waiving any argument regarding the claim.

CONCLUSION

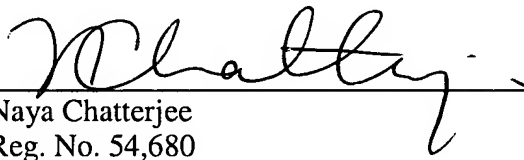
Applicants respectfully submit the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call the undersigned at (408) 720-8300.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

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